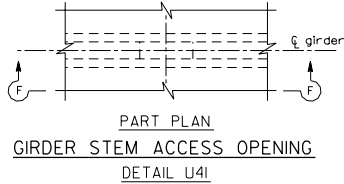
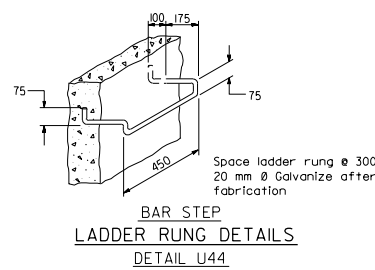
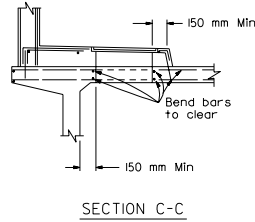
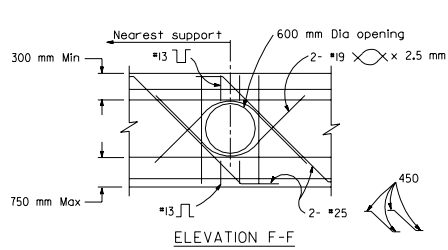


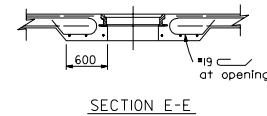
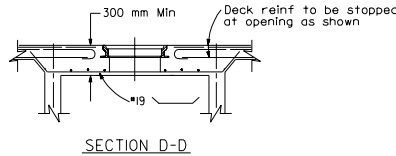
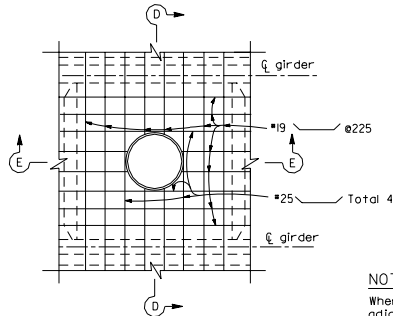


DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
<i>K.A. Rogerson</i> REGISTERED CIVIL ENGINEER July 1, 1999 PLANS APPROVAL DATE The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					
REGISTERED PROFESSIONAL ENGINEER <i>K.A. Rogerson</i> No. C25312 EX-12-31-01 CIVIL STATE OF CALIFORNIA					



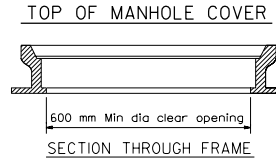
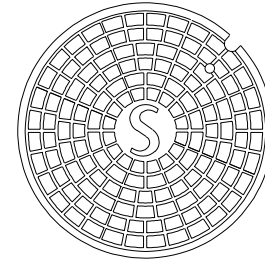
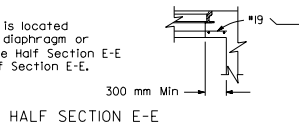
#### NOTES

- For exact location of openings see other sheets.
- Location and size of manholes may be modified as directed by the Engineer, provided minimum dimensions are maintained.
- All reinforcement detailed to be placed in addition to reinforcement shown on other sheets.



#### NOTE

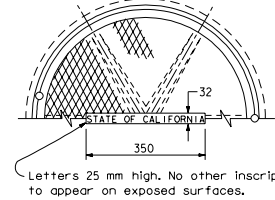
Where manhole is located adjacent to a diaphragm or abut, substitute Half Section E-E on one side of Section E-E.



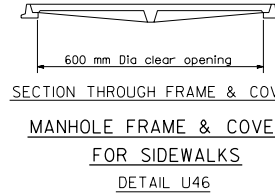
#### NON-ROCKING MANHOLE FRAME & COVER FOR DECKS DETAIL U45

#### NOTES

- The manhole frame and cover shall be made of gray cast iron. Mass for payment is 200 kg.
- All parts of the manhole frame and cover expect machined surfaces shall be coated with asphaltum paint.
- The manhole frame and cover shall be tested for accuracy of fit and shall be marked in sets before delivery. The cover shall fit the frame snugly but not tightly.
- Covers for use on sewer structures shall bear the letters "S"; on storm drain structures the letter "D"; on openings for utilities the letter "U".
- The mass shall not vary more than ten percent from the mass for payment.
- Step inserts may be substituted for the standard step detail. Step inserts shall comply with State Industrial Safety requirements.



#### TOP OF MANHOLE FRAME & COVER



#### NOTE

Frame and cover shall be cast iron, mass for payment is 110 kg.  
Galvanize complete assembly after fabrication.  
The mass shall not vary more than ten percent from the mass for payment.  
Cover shall be supplied with bolt down or locking devices.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

#### UTILITY DETAILS

NO SCALE  
ALL DIMENSIONS ARE IN  
MILLIMETERS UNLESS OTHERWISE SHOWN

B7-11